

PA-Score

PA SCORESHEETS

Site Name: BENDIX-TETERBORO FACILITY
CERCLIS ID No.: NJD078714433
Street Address: ROUTE 46
City/State/Zip: TETERBORO, NJ 07608

Investigator: DAVID E. TRIGGS
Agency/Organization: NJDEPE/RPSR/BSA
Street Address: 300 HORIZON CENTER
City/State: ROBBINSVILLE, NJ

Date: 03/19/92

148549



PA-Score 1.0 Scoresheets
BENDIX-TETERBORO FACILITY - 03/19/92

Page: 1

OMB Approval Number: 2050-0095
Approved for Use Through: 1/92

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT FORM	IDENTIFICATION	
	State: NJ	CERCLIS Number: NJD078714433
	CERCLIS Discovery Date: 12/28/87	

1. General Site Information

Name: BENDIX-TETERBORO FACILITY		Street Address: ROUTE 46			
City: TETERBORO	State: NJ	Zip Code: 07608	County: BERGEN	Co. Code:	Cong. Dist: 09
Latitude: 40° 51' 44.0"	Longitude: 74° 3' 49.0"	Approx. Area of Site: 71 acres		Status of Site: Active	

2. Owner/Operator Information

Owner: ALLIED BENDIX AEROSPACE			Operator: ALLIED BENDIX AEROSPACE		
Street Address: ROUTE 46			Street Address: ROUTE 46		
City: TETERBORO			City: TETERBORO		
State: NJ	Zip Code: 07608	Telephone: 201-288-2000	State: NJ	Zip Code: 07608	Telephone: 201-288-2000
Type of Ownership: Private			How Initially Identified: State/Local Program		

PA-Score 1.0 Scoresheets
BENDIX-TETERBORO FACILITY - 03/19/92

Page: 2

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT FORM		IDENTIFICATION	
		State: NJ	CERCLIS Number: NJD078714433
		CERCLIS Discovery Date: 12/28/87	
3. Site Evaluator Information			
Name of Evaluator: DAVID E. TRIGGS		Agency/Organization: NJDEPE/RPSR/BSA	Date Prepared: 03/19/92
Street Address: 300 HORIZON CENTER		City: ROBBINSVILLE	State: NJ
Name of EPA or State Agency Contact: KENNETH J. KLOO		Telephone: 609-584-4280	
Street Address: 300 HORIZON CENTER		City: ROBBINSVILLE	State: NJ
4. Site Disposition (for EPA use only)			
Emergency Response/Removal Assessment Recommendation: No Date:	CERCLIS Recommendation: Other UNDER ECRA Date: 03/19/92	Signature: Name: DAVID E. TRIGGS Position: HSMS	

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT FORM	IDENTIFICATION	
	State: NJ	CERCLIS Number: NJD078714433
	CERCLIS Discovery Date: 12/28/87	

5. General Site Characteristics

Predominant Land Uses Within 1 Mile of Site: Industrial	Site Setting: Urban	Years of Operation: Beginning Year: 1937 Ending Year: 1992
Type of Site Operations: Other: MANUFACTURE OF ELECTRONIC EQUIPMENT		Waste Generated: Onsite
		Waste Deposition Authorized By: Present Owner
		Waste Accessible to the Public No
		Distance to Nearest Dwelling, School, or Workplace: 50 Feet

6. Waste Characteristics Information

<table> <tr> <th>Source Type</th> <th>Quantity</th> <th>Tier</th> </tr> <tr> <td>Non-drum containers</td> <td>1.00e+05 gals</td> <td>V</td> </tr> <tr> <td>Drums</td> <td>1.00e+02 drums</td> <td>V</td> </tr> <tr> <td>Non-drum containers</td> <td>5.00e+05 gals</td> <td>V</td> </tr> </table>	Source Type	Quantity	Tier	Non-drum containers	1.00e+05 gals	V	Drums	1.00e+02 drums	V	Non-drum containers	5.00e+05 gals	V	General Types of Waste: Metals Organics Inorganics Solvents
Source Type	Quantity	Tier											
Non-drum containers	1.00e+05 gals	V											
Drums	1.00e+02 drums	V											
Non-drum containers	5.00e+05 gals	V											
Tier Legend C = Constituent W = Wastestream V = Volume A = Area	Physical State of Waste as Deposited Solid Liquid												

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT FORM		IDENTIFICATION	
		State: NJ	CERCLIS Number: NJD078714433
		CERCLIS Discovery Date: 12/28/87	
7. Ground Water Pathway			
Is Ground Water Used for Drinking Water Within 4 Miles: No	Is There a Suspected Release to Ground Water: Yes	List Secondary Target Population Served by Ground Water Withdrawn From:	
Type of Ground Water Wells Within 4 Miles: Municipal Private	Have Primary Target Drinking Water Wells Been Identified: No	0 - 1/4 Mile 0 >1/4 - 1/2 Mile 0 >1/2 - 1 Mile 0 >1 - 2 Miles 5000 >2 - 3 Miles 6000 >3 - 4 Miles 3500 Total 14500	
Depth to Shallowest Aquifer: 5 Feet Karst Terrain/Aquifer Present: No	Nearest Designated Wellhead Protection Area: None within 4 Miles		

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT FORM	IDENTIFICATION	
	State: NJ	CERCLIS Number: NJD078714433
	CERCLIS Discovery Date: 12/28/87	

8. Surface Water Pathway

Part 1 of 4

Type of Surface Water Draining
Site and 15 Miles Downstream:

Stream

River

Other:

RESERVOIR

Shortest Overland Distance From Any
Source to Surface Water:

100 Feet

0.0 Miles

Is there a Suspected Release to
Surface Water: Yes

Site is Located in:
>100 yr - 500 yr floodpla

8. Surface Water Pathway

Part 2 of 4

Drinking Water Intakes Along the Surface Water Migration Path: Yes

Have Primary Target Drinking Water Intakes Been Identified: No

Secondary Target Drinking Water Intakes:

Name

Water Body/Flow(cfs)

Population Served

HAWORTH

large river/ >10000

750000

Total Within 15 Miles:

750000

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT FORM	IDENTIFICATION	
	State: NJ	CERCLIS Number: NJD078714433
	CERCLIS Discovery Date: 12/28/87	

8. Surface Water Pathway

Part 3 of 4

Fisheries Located Along the Surface Water Migration Path: Yes

Have Primary Target Fisheries Been Identified: No

Secondary Target Fisheries:

Fishery Name	Water Body Type/Flow(cfs)
HACKENSACK RIVER	large stream/river/ >1000-10000
ORADELL RESERVOIR	large river/ >10000

8. Surface Water Pathway

Part 4 of 4

Wetlands Located Along the Surface Water Migration Path? (y/n) No

Have Primary Target Wetlands Been Identified? (y/n) No

Secondary Target Wetlands:
None

Other Sensitive Environments Along the Surface Water Migration Path: Yes

Have Primary Target Sensitive Environments Been Identified: No

Secondary Target Sensitive Environments:

Water Body/Flow(cfs)	Sensitive Environment Type
large stream/river/ >1000-10000	FRESHWATER WETLANDS
large river/ >10000	FRESHWATER WETLANDS

<p>POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT FORM</p>	IDENTIFICATION																	
	<p>State: NJ</p>	<p>CERCLIS Number: NJD078714433</p>																
	<p>CERCLIS Discovery Date: 12/28/87</p>																	
<p>9. Soil Exposure Pathway</p>																		
<p>Are People Occupying Residences or Attending School or Daycare on or Within 200 Feet of Areas of Known or Suspected Contamination: No</p>	<p>Number of Workers Onsite: 101 - 1000</p>																	
<p>Have Terrestrial Sensitive Environments Been Identified on or Within 200 Feet of Areas of Known or Suspected Contamination: No</p>																		
<p>10. Air Pathway</p>																		
<p>Total Population on or Within:</p> <table border="0"> <tr> <td>Onsite</td> <td>0</td> </tr> <tr> <td>0 - 1/4 Mile</td> <td>900</td> </tr> <tr> <td>>1/4 - 1/2 Mile</td> <td>27</td> </tr> <tr> <td>>1/2 - 1 Mile</td> <td>1000</td> </tr> <tr> <td>>1 - 2 Miles</td> <td>50000</td> </tr> <tr> <td>>2 - 3 Miles</td> <td>75000</td> </tr> <tr> <td>>3 - 4 Miles</td> <td>80000</td> </tr> <tr> <td>Total</td> <td>206927</td> </tr> </table>	Onsite	0	0 - 1/4 Mile	900	>1/4 - 1/2 Mile	27	>1/2 - 1 Mile	1000	>1 - 2 Miles	50000	>2 - 3 Miles	75000	>3 - 4 Miles	80000	Total	206927	<p>Is There a Suspected Release to Air: Yes</p> <p>Wetlands Located Within 4 Miles of the Site: No</p> <p>Other Sensitive Environments Located Within 4 Miles of the Site: No</p>	
Onsite	0																	
0 - 1/4 Mile	900																	
>1/4 - 1/2 Mile	27																	
>1/2 - 1 Mile	1000																	
>1 - 2 Miles	50000																	
>2 - 3 Miles	75000																	
>3 - 4 Miles	80000																	
Total	206927																	
<p>Sensitive Environments Within 1/2 Mile of the Site: None</p>																		

WASTE CHARACTERISTICS

Waste Characteristics (WC) Calculations:

1 ELECTRONICS	Non-drum containers	WQ value	maximum
Volume	1.00E+05 gals	2.00E+02	2.00E+02
2 ELECTRONICS	Drums	WQ value	maximum
Volume	1.00E+02 drums	1.00E+01	1.00E+01
3 ELECTRONICS	Non-drum containers	WQ value	maximum
Volume	5.00E+05 gals	1.00E+03	1.00E+03

WQ total 1.21E+03

Waste Characteristics Score: WC = 32

Ground Water Pathway Criteria List
Suspected Release

Are sources poorly contained? (y/n/u)	N
Is the source a type likely to contribute to ground water contamination (e.g., wet lagoon)? (y/n/u)	N
Is waste quantity particularly large? (y/n/u)	Y
Is precipitation heavy? (y/n/u)	Y
Is the infiltration rate high? (y/n/u)	N
Is the site located in an area of karst terrain? (y/n)	N
Is the subsurface highly permeable or conductive? (y/n/u)	N
Is drinking water drawn from a shallow aquifer? (y/n/u)	Y
Are suspected contaminants highly mobile in ground water? (y/n/u)	Y
Does analytical or circumstantial evidence suggest ground water contamination? (y/n/u)	Y

Other criteria? (y/n) N

SUSPECTED RELEASE? (y/n) Y

Summarize the rationale for Suspected Release:

GROUNDWATER SAMPLING HAS CONFIRMED THE PRESENCE OF CONTAMINANTS.

Ground Water Pathway Criteria List
Primary Targets

Is any drinking water well nearby? (y/n/u)	N
Has any nearby drinking water well been closed? (y/n/u)	N
Has any nearby drinking water well user reported foul-testing or foul-smelling water? (y/n/u)	N
Does any nearby well have a large drawdown/high production rate? (y/n/u)	N
Is any drinking water well located between the site and other wells that are suspected to be exposed to a hazardous substance? (y/n/u)	N
Does analytical or circumstantial evidence suggest contamination at a drinking water well? (y/n/u)	N
Does any drinking water well warrant sampling? (y/n/u)	N

Other criteria? (y/n) N

PRIMARY TARGET(S) IDENTIFIED? (y/n) N

Summarize the rationale for Primary Targets:

PA-Score 1.0 Scoresheets
BENDIX-TETERBORO FACILITY - 03/19/92

Page: 4

GROUND WATER PATHWAY SCORESHEETS

Pathway Characteristics

Pathway Characteristics			Ref.
Do you suspect a release? (y/n)	Yes		
Is the site located in karst terrain? (y/n)	No		
Depth to aquifer (feet):	5		
Distance to the nearest drinking water well (feet):	5280		
LIKELIHOOD OF RELEASE	Suspected Release	No Suspected Release	References
1. SUSPECTED RELEASE	550		
2. NO SUSPECTED RELEASE		0	
LR =	550	0	

Targets

TARGETS	Suspected Release	No Suspected Release	References
3. PRIMARY TARGET POPULATION 0 person(s)	0		
4. SECONDARY TARGET POPULATION Are any wells part of a blended system? (y/n) N	204	0	
5. NEAREST WELL	5	0	
6. WELLHEAD PROTECTION AREA None within 4 Miles	0	0	
7. RESOURCES	5	0	
T =	214	0	

WASTE CHARACTERISTICS

WC =

32	0
----	---

GROUND WATER PATHWAY SCORE:

46

PA-Score 1.0 Scoresheets
BENDIX-TETERBORO FACILITY - 03/19/92

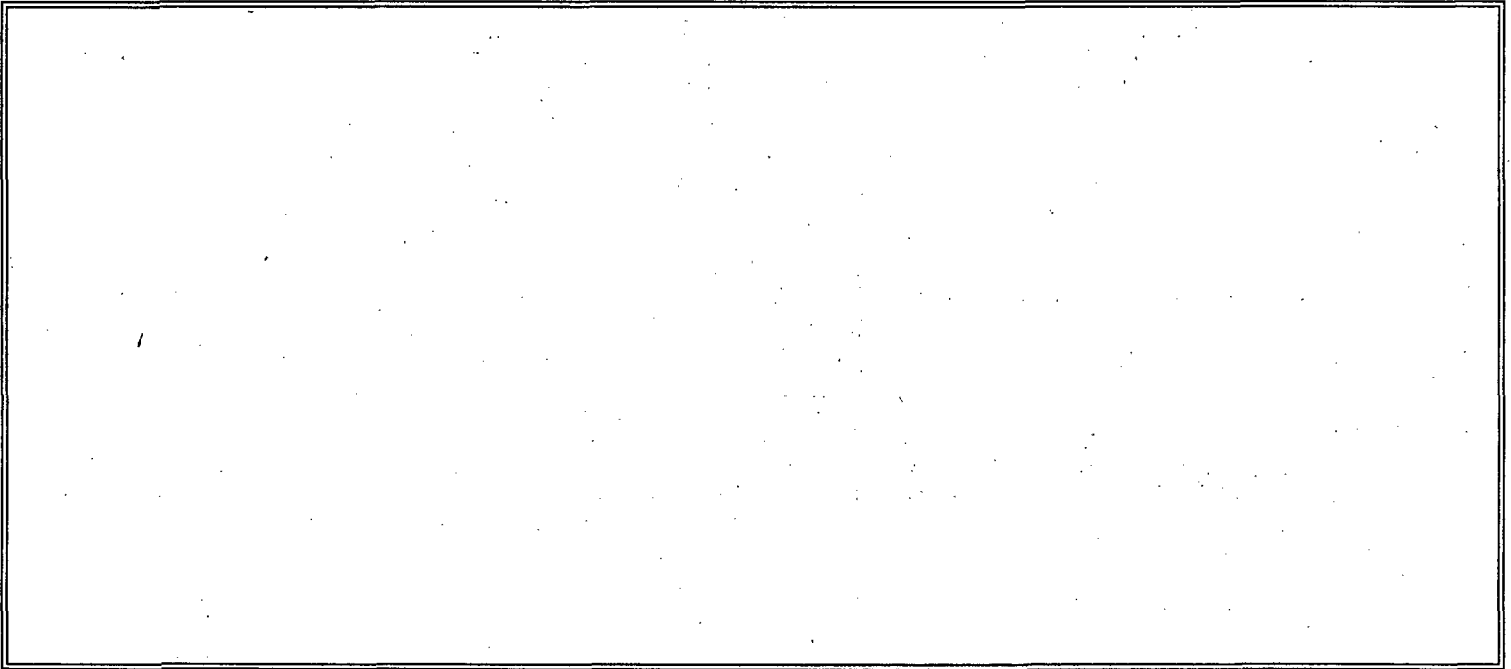
Page: 5

Ground Water Target Populations

Primary Target Population Drinking Water Well ID	Dist. (miles)	Population Served	Reference	Value
None				
Total				

Secondary Target Population Distance Categories	Population Served	Reference	Value
0 to 1/4 mile	0		0
Greater than 1/4 to 1/2 mile	0		0
Greater than 1/2 to 1 mile	0		0
Greater than 1 to 2 miles	5000		94
Greater than 2 to 3 miles	6000		68
Greater than 3 to 4 miles	3500		42
Total			204

Apportionment Documentation for a Blended System



Surface Water Pathway Criteria List
Suspected Release

Is surface water nearby? (y/n/u)	Y
Is waste quantity particularly large? (y/n/u)	Y
Is the drainage area large? (y/n/u)	Y
Is rainfall heavy? (y/n/u)	Y
Is the infiltration rate low? (y/n/u)	Y
Are sources poorly contained or prone to runoff or flooding? (y/n/u)	N
Is a runoff route well defined(e.g.ditch/channel to surf.water)? (y/n/u)	Y
Is vegetation stressed along the probable runoff path? (y/n/u)	N
Are sediments or water unnaturally discolored? (y/n/u)	N
Is wildlife unnaturally absent? (y/n/u)	N
Has deposition of waste into surface water been observed? (y/n/u)	N
Is ground water discharge to surface water likely? (y/n/u)	Y
Does analytical/circumstantial evidence suggest S.W. contam? (y/n/u)	Y

Other criteria? (y/n) N

SUSPECTED RELEASE? (y/n) Y

Summarize the rationale for Suspected Release:

SAMPLES COLLECTED FROM A DRAINAGE DITCH RUNNING ADJACENT TO THE SITE INDICATE CONTAMINATION. THE DITCH IS USED BY A VARIETY OF INDUSTRY UPSTREAM OF THE FACILITY.

Surface Water Pathway Criteria List
Primary Targets

Is any target nearby? (y/n/u) If yes: N
 N Drinking water intake
 N Fishery
 N Sensitive environment

Has any intake, fishery, or recreational area been closed? (y/n/u) N

Does analytical or circumstantial evidence suggest surface water
 contamination at or downstream of a target? (y/n/u) Y

Does any target warrant sampling? (y/n/u) If yes: N
 N Drinking water intake
 N Fishery
 N Sensitive environment

Other criteria? (y/n) N

PRIMARY INTAKE(S) IDENTIFIED? (y/n) N

Summarize the rationale for Primary Intakes:

THERE IS ONE SURFACE WATER INTAKE 7 MILES DOWNSTREAM OF THE FACILITY

continued -----

continued -----

Other criteria? (y/n) N

PRIMARY FISHERY(IES) IDENTIFIED? (y/n)

N

Summarize the rationale for Primary Fisheries:

Other criteria? (y/n) N

PRIMARY SENSITIVE ENVIRONMENT(S) IDENTIFIED? (y/n)

N

Summarize the rationale for Primary Sensitive Environments:

SURFACE WATER PATHWAY SCORESHEETS

Pathway Characteristics

Pathway Characteristics			Ref.
Do you suspect a release? (y/n)	Yes		
Distance to surface water (feet):	100		
Flood frequency (years):	500		
What is the downstream distance (miles) to:			
a. the nearest drinking water intake?	7.0		
b. the nearest fishery?	2.0		
c. the nearest sensitive environment?	2.0		
LIKELIHOOD OF RELEASE	Suspected Release	No Suspected Release	References
1. SUSPECTED RELEASE	550		
2. NO SUSPECTED RELEASE		0	
LR =	550	0	

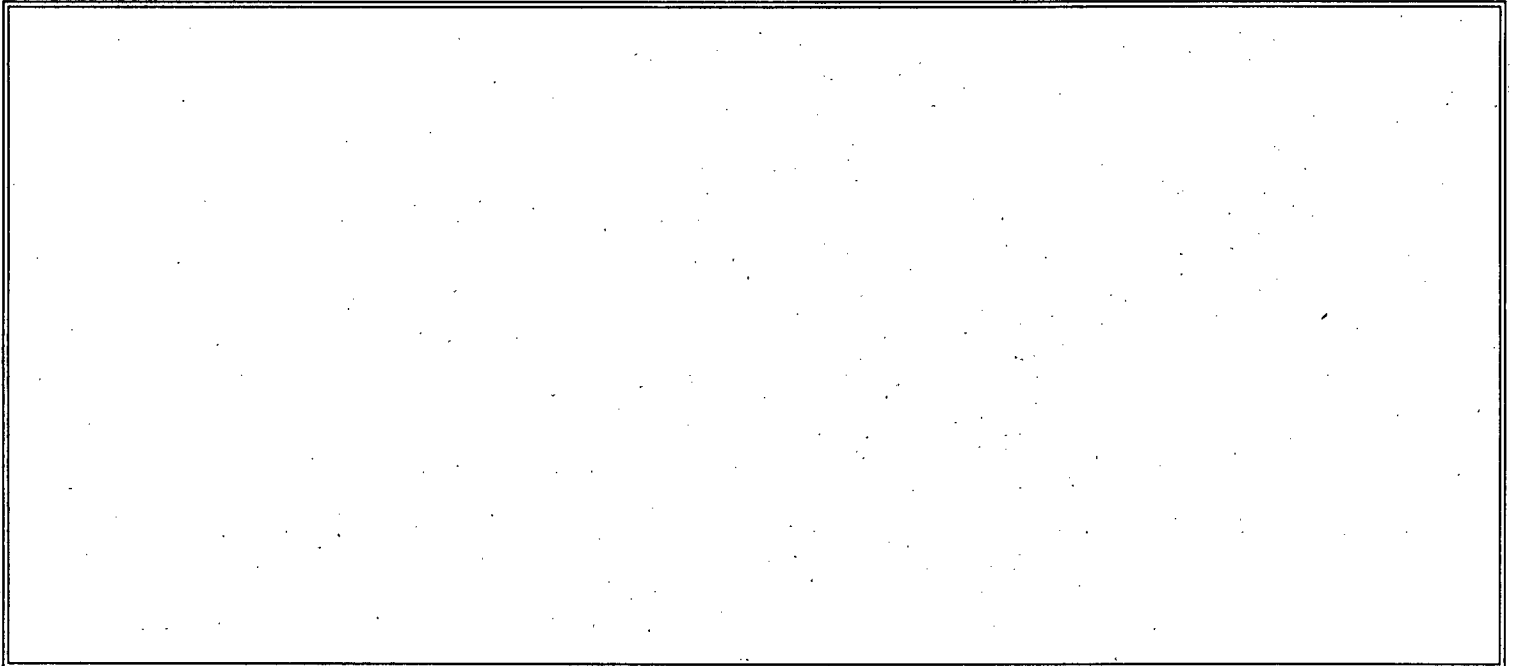
Drinking Water Threat Targets

TARGETS	Suspected Release	No Suspected Release	References
3. Determine the water body type, flow (if applicable), and number of people served by each drinking water intake.			
4. PRIMARY TARGET POPULATION 0 person(s)	0		
5. SECONDARY TARGET POPULATION Are any intakes part of a blended system? (y/n): N	5	0	
6. NEAREST INTAKE	0	0	
7. RESOURCES	5	0	
T =	10	0	

Drinking Water Threat Target Populations

Intake Name	Primary (y/n)	Water Body Type/Flow	Population Served	Ref.	Value
1 HAWORTH	N	>10000 cfs	750000		0
Total Primary Target Population Value					0
Total Secondary Target Population Value					0

Apportionment Documentation for a Blended System



Human Food Chain Threat Targets

TARGETS	Suspected Release	No Suspected Release	References
8. Determine the water body type and flow for each fishery within the target limit.			
9. PRIMARY FISHERIES	0		
10. SECONDARY FISHERIES	210	0	
T =	210	0	

Human Food Chain Threat Targets

Fishery Name	Primary (y/n)	Water Body Type/Flow	Ref.	Value
1 HACKENSACK RIVER	N	>1000-10000 cfs		12
2 ORADELL RESERVOIR	N	>10000 cfs		12
Total Primary Fisheries Value				0
Total Secondary Fisheries Value				24

Environmental Threat Targets

TARGETS	Suspected Release	No Suspected Release	References
11. Determine the water body type and flow (if applicable) for each sensitive environment.			
12. PRIMARY SENSITIVE ENVIRONMENTS	0		
13. SECONDARY SENSITIVE ENVIRONS.	10	0	
T =	10	0	

Environmental Threat Targets

Sensitive Environment Name	Primary (y/n)	Water Body Type/Flow	Ref.	Value
1 HACKENSACK RIVER	N	>1000-10000 cfs		12
2 ORADELL RESERVOIR	N	>10000 cfs		12
None				
Total Primary Sensitive Environments Value				0
Total Secondary Sensitive Environments Value				0

Surface Water Pathway Threat Scores

Threat	Likelihood of Release (LR) Score	Targets (T) Score	Pathway Waste Characteristics (WC) Score	Threat Score $LR \times T \times WC / 82,500$
Drinking Water	550	10	32	2
Human Food Chain	550	210	32	45
Environmental	550	10	32	2

SURFACE WATER PATHWAY SCORE:

49

Soil Exposure Pathway Criteria List
Resident Population

Is any residence, school, or daycare facility on or within 200 feet of an area of suspected contamination? (y/n/u)	N
Is any residence, school, or daycare facility located on adjacent land previously owned or leased by the site owner/operator? (y/n/u)	N
Is there a migration route that might spread hazardous substances near residences, schools, or daycare facilities? (y/n/u)	N
Have onsite or adjacent residents or students reported adverse health effects, exclusive of apparent drinking water or air contamination problems? (y/n/u)	N
Does any neighboring property warrant sampling? (y/n/u)	Y

Other criteria? (y/n) N

RESIDENT POPULATION IDENTIFIED? (y/n) N

Summarize the rationale for Resident Population:

AN ADJACENT FACILITY IS UNDERGOING A RADIOLOGICAL SURVEY FROM PAST INDUSTRIAL ACTIVITIES NOT RELATED TO BENDIX.

SOIL EXPOSURE PATHWAY SCORESHEETS

Pathway Characteristics

	Ref.
Do any people live on or within 200 ft of areas of suspected contamination? (y/n) No	
Do any people attend school or daycare on or within 200 ft of areas of suspected contamination? (y/n) No	
Is the facility active? (y/n): Yes	

LIKELIHOOD OF EXPOSURE	Suspected Contamination	References
1. SUSPECTED CONTAMINATION LE =	550	

Targets

2. RESIDENT POPULATION 0 resident(s) 0 school/daycare student(s)	0	
3. RESIDENT INDIVIDUAL	0	
4. WORKERS 101 - 1000	10	
5. TERRES. SENSITIVE ENVIRONMENTS	0	
6. RESOURCES	5	
T =	15	

WASTE CHARACTERISTICS

WC =

32

RESIDENT POPULATION THREAT SCORE:

3

NEARBY POPULATION THREAT SCORE:

1

Population Within 1 Mile: 1 - 10,000

SOIL EXPOSURE PATHWAY SCORE:

4

Soil Exposure Pathway Terrestrial Sensitive Environments

Terrestrial Sensitive Environment Name	Reference	Value
None		
Total Terrestrial Sensitive Environments Value		

Air Pathway Criteria List
Suspected Release

Are odors currently reported? (y/n/u) N

Has release of a hazardous substance to the air
been directly observed? (y/n/u) Y

Are there reports of adverse health effects (e.g., headaches,
nausea, dizziness) potentially resulting from migration
of hazardous substances through the air? (y/n/u) N

Does analytical/circumstantial evidence suggest release to air? (y/n/u) Y

Other criteria? (y/n) N

SUSPECTED RELEASE? (y/n) Y

Summarize the rationale for Suspected Release:

PRIOR TO 1967 BENDIX BURNED WOOD, GREASE AND MAGNESIUM CHIPS IN OPEN
PITS WHICH MAY HAVE RESULTED IN THE RELEASE OF HAZARDOUS
PARTICULATES.

AIR PATHWAY SCORESHEETS

Pathway Characteristics

Do you suspect a release? (y/n)			Yes	Ref.
Distance to the nearest individual (feet):			5280	
LIKELIHOOD OF RELEASE	Suspected Release	No Suspected Release	References	
1. SUSPECTED RELEASE	550			
2. NO SUSPECTED RELEASE		0		
LR =	550	0		

Targets

TARGETS	Suspected Release	No Suspected Release	References
3. PRIMARY TARGET POPULATION 900 person(s)	9000		
4. SECONDARY TARGET POPULATION	47	0	
5. NEAREST INDIVIDUAL	50	0	
6. PRIMARY SENSITIVE ENVIRONS.	0		
7. SECONDARY SENSITIVE ENVIRONS.	0	0	
8. RESOURCES	5	0	
T =	9102	0	

WASTE CHARACTERISTICS

WC =

32	0
----	---

AIR PATHWAY SCORE:

100

Air Pathway Secondary Target Populations

Distance Categories	Population	References	Value
Onsite	N.A.		0
Greater than 0 to 1/4 mile	N.A.		0
Greater than 1/4 to 1/2 mile	27		0
Greater than 1/2 to 1 mile	1000		1
Greater than 1 to 2 miles	50000		27
Greater than 2 to 3 miles	75000		12
Greater than 3 to 4 miles	80000		7
Total Secondary Population Value			47

Air Pathway Primary Sensitive Environments

Sensitive Environment Name	Reference	Value
None		
Total Primary Sensitive Environments Value		

Air Pathway Secondary Sensitive Environments

Sensitive Environment Name	Distance	Reference	Value
None			
Total Secondary Sensitive Environments Value			

PA-Score 1.0 Scoresheets
BENDIX-TETERBORO FACILITY - 03/19/92

Page: 23

SITE SCORE CALCULATION	SCORE
GROUND WATER PATHWAY SCORE:	46
SURFACE WATER PATHWAY SCORE:	49
SOIL EXPOSURE PATHWAY SCORE:	4
AIR PATHWAY SCORE:	100
SITE SCORE:	60

SUMMARY

1. Is there a high possibility of a threat to any nearby drinking water well(s) by migration of a hazardous substance in ground water? No

If yes, identify the well(s).

If yes, how many people are served by the threatened well(s)? 0

2. Is there a high possibility of a threat to any of the following by hazardous substance migration in surface water?
- A. Drinking water intake No
 - B. Fishery No
 - C. Sensitive environment (wetland, critical habitat, others) No

If yes, identity the target(s).

3. Is there a high possibility of an area of surficial contamination within 200 feet of any residence, school, or daycare facility? No

If yes, identify the properties and estimate the associated population(s)

4. Are there public health concerns at this site that are not addressed by PA scoring considerations? No

If yes, explain: